

PROJECT TITLE : SAVOURY
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The objective of the project SAVOURY is to prepare flavour formulations using NINO mass and its hydrolysis products as raw material. Upon pyrolysis these formulations should produce a (burley) tobacco type flavour and they should be applied to improve the subjectives primarily of RL sheet.

The present problems are :

- The installation of an olfactory test system to make a first evaluation of the flavour formulations produced.
- The screening of test conditions for the reaction between hydrolyzed NINO mass proteins and sugars.

1. Flavour Evaluation

Flavour samples are sprayed on plain RL and pyrolyzed at different conditions (temperature, % oxygen, flow rates). The flavours obtained will be compared to those delivered during pyrolysis of a high quality burley tobacco.

The temperature of four ovens has been calibrated for a range of between 100° and 800°C. The desired temperatures are reached after 20 minutes.

A training period has started to obtain the subjective impression of the characteristic burley pyrolysis flavour at different test conditions.

2. Production of Reaction Flavours

Two non enzymatic browning reactions were produced using the following conditions :

	Flavour HCl 32	Flavour H_3PO_4 -11
Initial amino acid composition	Standard Hydrolysis HCl (6N)	Standard Hydrolysis H_3PO_4 (10N)
Time of reaction (hr)	15	75
Temperature of reaction (°C)	90	90
pH of reaction	3.5	7.0
Agent of neutralization	NH_4OH	NH_4OH
Sugar	Glucose	Glucose
Total solid content (%)	55	55

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